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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/770,707	02/04/2004	Toshihiro Suzuki	248499US8	1311

22850 7590 12/01/2008

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EXAMINER
SAMUEL, DEWANDA A

ART UNIT	PAPER NUMBER
2416	

NOTIFICATION DATE	DELIVERY MODE
12/01/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/770,707	SUZUKI ET AL.	
	Examiner	Art Unit	
	DEWANDA SAMUEL	2416	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *29 July 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-13 and 15-19* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *6 and 7* is/are allowed.

6)☒ Claim(s) *1-5,8-13 and 15-19* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *20 February 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This communication is responsive to the communication filed on 07/29/2008.

2. Claims 1-13 and 15-19 are pending claims 13 and 20 are cancelled.

Response to Arguments

3. Applicant's arguments with respect to claim1-13 and 15-19 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Inoue et al. (US Patent 6,515,974)in view of Watanuki et al. (PG PUB 2002/0159478).

With regard to claim 1, Inoue et al. discloses having a mobile communication control system having a plurality of access nodes and a mobile node comprising a source access node to which a source mobile terminal is connected via a radio rink,**(Inoue discloses having a plurality of private network home agents 5 and a Internet home agent 6 (access node") and mobile terminals ("mobile node") in which the HA-p1 (home agent, "source access node") is connected to mobile**

terminal 3 connected via private network 1-1 (column 18 line 4-15 and fig. 18),the source access node including : an address manager configured to manage a first address and a second address of a destination mobile terminal connected to the mobile node via a radio rink; an address changer configured to replace a destination address in a header of a packet transmitted from the source mobile terminal without increasing the size of the header , from the first address of the destination mobile terminal to replaced by second address of the destination mobile terminal,**(Inoue et al. discloses having a private network home agent 5 ("access node") with a home management unit 51 ("address manger") for managing home address of the mobile terminal and a current location address management unit 52 ("address changer") for managing the current location address of the mobile terminal (column 19 line 36-44). Inoue further discloses where the private network 1 is a radio accessible network and the mobile terminal 3 has the interfaces that is automatically switched from wire to radio when mobile terminal enters a radio zone (column 11 line 1-6).** and a router configured to route the packet to a destination access node to which the mobile node is connected via a radio rink, in accordance with the changed destination address **,(Inoue et al. discloses having encapsulation and transfer unit 53 for transferring packets by encapsulating them appropriately (column 19 line 40-42). Inoue et al. further discloses the encapsulated packet has the ID of the mobile terminal 3 ("mobile node") and the selection of the appropriate home agent ("destination access node") is carried out at the private 1-2 side by using this mobile ID (column 18 line 51-65),** the destination access node including : an address manager

configured to manage the second address and a third address of the destination mobile terminal; and a router configured to route the packet to the mobile node in accordance with the changed destination address,**(Inoue et al. discloses having a internet home agent 6 ("destination access node") connected to a DHCP server whereby allocating a home address Haddr-g to the mobile terminal 3... also information on a pair home address Haddr-g ("third address") and the private network-side address Haddr-p 5 ("second address", column 11 line 21-32). Inoue et al. further discloses having a internet home agent 6 ("destination access node") with a home management unit 51 ("address manager") for managing home address of the mobile terminal and a current location address management unit 52 ("address changer") for managing the current location address of the mobile terminal(column 19 line 36-44),**

However, Inoue et al. does not explicitly discloses having an address manager configured to manage the first address and the third address of the destination mobile terminal; and a packet transmitter configured to transmit the packet to the destination mobile terminal in accordance with the changed destination address,**(Watanuki et al. discloses having a Ipv4/v6 mobile node ("mobile node") comprised of a movement status table 119 ("address manager") which is updated when there is movement register process 60 (page paragraph 140 line 1-18)... also the movement process portion 114 is configured to send out movement detection message which includes the new address destination address (page 7 paragraph**

i26-136 and fig. 1). In addition, Watanuki et al. discloses having Ipv6 packet transmission portion 113 ("packet transmitter") thereby transmitting packets for the Ipv4/v6 mobile node who has move to a new network and the packets are destined for a new network address which is encapsulated in the header of the packet (page 9 paragraph 172-181).

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have a mobile terminal 3 ("mobile node") as taught by Inoue et al. with a movement status table 119 which manages the addresses of the mobile node and the home agent, movement process portion 114 is configured to send out movement detection message which includes the new address destination address, and Ipv6 packet transmission portion 113 as taught by Watanuki et al. to provide a .mobile node that assisted in the movement between IP networks.

However, the combination of Inoue et al. and Watanuki et al**.** an address changer configured to replace the destination address in a header in the received packet, from the second address of the destination mobile terminal to replaced by third address of the destination mobile terminal without increasing the size of the header ; an address changer configured to change the destination address in the header of the received packet, from the third address of the destination mobile terminal without increasing the size of the header to the first address of the destination mobile terminal; **(Khali et al. discloses having a reduced overhead tunneling techniques in a communication**

network having mobile foreign agents, see title. Khali et al. further discloses eliminating the use of multiple source/destination headers attached to an information packet during the tunneling operation, see Abstract. Khalil et al. discloses having a home agent 39 replacing within an information packet 205 source/destination header with a new source/destination header information, see col. 10 lines 45-67). It is inferred the replacing of the source /destination header does not increase the header within the packet.

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to incorporate replacing source/destination header with a new source/destination header information as taught by Khalil et al. into the communication system of Inoue combined with Watanuki et al. providing a technique dynamically providing a plurality of destination addresses whereby increasing advertising accessibility

With regard to claim 2, in combination Inoue et al. , Watanuki et al. and Khalil et al. teaches the mobile communication control system recited in claim 1. further comprising a network management server, **(Inoue et al. discloses having a mobile terminal 3 ("mobile node").., a DHCP server in fig. 4 ("network management server") allocating a new home address (e.g. Haddr-p) to the mobile terminal as it moves to the new network (e.g. Internet 2, column 11 line 21-33);** the network

management server includes: an address manager configured to manage a first address, a second address and a third address of the new mobile terminal in accordance with the received address assignment information,**(Inoue et al. .discloses having a DHCP server 27 in fig. 4 ("network management server") a manages the home address (e.g. Haddr-p, "first address") for the mobile terminal 3 the new network address Haddr-g ("second address") and care of address ("third address") for the mobile terminal (column 12 line 50-67);** and an address assignment direction transmitter configured to transmit an address assignment direction for the new mobile terminal to the source access node and the destination access node,**(Inoue et al. discloses having a packet relay device 4 ("address assignment direction transmitter") that is configured to transmit the home agent (Haddr-p) address (" source access node") and home agent (Haddr-g) address ("destination access node") for the mobile terminal 3 , see column 11 line 44-51);** and the address manager of the source access node manages the first address and the second address of the new mobile terminal in accordance with the address assignment direction,**(Inoue et al. discloses ,having a home agent 5 (" source access node") that manges the home address ("first address") and the care-of-address ("second address") within the visiting network for the mobile terminal 3 ("new mobile terminal", column 13 line 25-33). It is inferred the home agent 5 ("source access node") is capable of managing the address of the mobile terminal 3 within the home network);** and the address manager of the destination access node manages the second address and the third address of the new mobile terminal in

accordance with the address assignment,**(Inoue et al. discloses having a home agent 6 ("destination access node") in the visiting network that manages a care-of- address ("second address") and the home address of the visiting home agent 6 (Haddr-g, column 14 line 3-6). It is inferred the home agent 6 ("destination access node") is capable of managing the address of the mobile terminal 3 within the visiting network.**

With regard to claim 3, in combination Inoue et al. , Watanuki et al. and Khalil et al. teaches the mobile communication control system recited in claim 1. further comprising a network management server, wherein the destination access node comprises an address assignment information transmitter configured to transmit address assignment information for the destination mobile terminal connected to the mobile node to the network management server in accordance with an address assignment request transmitted from the mobile node,**(Inoue et al. discloses DHCP server ("network management server"), see in fig. 5 a home agent 6 ("destination access node")...the home agent 6 ("destination access node") carries out the usual mobility binding generation (sets the care-of address= CoA-g as the bind of the home address=Haddrr-g). It is inferred the home agent 6 is capable of transmitting assigned addresses)** ; the network management server includes: an address manager configured to manage a first address, a second address and a third address of the destination mobile terminal in accordance with the received address

assignment information,**(Inoue et al. discloses having a DHCP server 27 in fig. 4 ('"network management server") a manages the home address (. e.g. Haddr-p, "first address") for the mobile terminal 3 the new network address Haddr-g ("second address") and care of address ("third address") for the mobile terminal , see column 12 line 50-67);** and an address assignment direction transmitter configured to transmit an address assignment direction for the destination mobile terminal to the source access node,**(Inoue et al. discloses having a packet relay device 4 ("address assignment direction transmitter") in which exchange messages that contains pair information for the mobile terminal 3 ("destination mobile terminal", column 11 line 60-63)...the pair information the home address Haddr-g and the private network side address Haddr-p is notified to the Internet home agent (HA-g) 6. The Internet home agent (HA-g) 6 also notifies this pair information to private network home agent (HA-p, "source access node") 5 through the packet relay device 4 ("address assignment direction transmitter", column 11 line 25- 33).;** and the address manager of the source access node manages the first address and the second address of the destination mobile terminal in accordance with the address assignment direction,**(Inoue et al discloses having a home agent manages a home address (first address") and a care-of-address ("second address") of the mobile terminal 3 ("mobile terminal", column 10 line 6-14).**

However, Inoue et al does not explicitly disclose the mobile node comprises an address assignment information transmitter configured to transmit address assignment information for a new mobile terminal,**(Watanuki et al. discloses having a IPv6 movement registration processing portion 116 which sends address within a movement registration request message issued by a manual setting of the DHCP (page 8 paragraph 153-154).**

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have a mobile terminal 3 ("mobile node") as taught by Inoue et al. with a manual setting of the DHCP thereby assigning address as taught by Watanuki et al. to provide a mechanism that will keep track of the mobile terminal in the network.

6. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Inoue et al. (US Patent 6,515,974) in view of Leung (US Patent 6,636,498).

With regard to claim 4, a network management server in a mobile communication network for transferring a packet to a destination mobile terminal connected to a mobile node via a radio link, the mobile node being connected to a destination access node via a radio rink,**(Inoue et al. discloses having DCHP server ("network management server") in figo4 in a Internet network ("mobile**

communication network").., the DCHP server ("network management server") connected to the mobile terminal ("destination mobile terminal")...the mobile terminal 3 ("mobile node") connected to the home agent 5 ("destination access node", fig. 4); the server comprising: an address manager configured to manage a first address, a second address and a third address of the destination mobile terminals,**(Inoue et al. discloses having a DHCP server 27 in fig. 4 ("network management server") a manages the home address (e.g. Haddr-p, "first address") for the mobile terminal 3 the new network address Haddr-g ("second address") and care of address ("third address") for the mobile terminal , see column 12 line 50-67);** and an address assignment direction transmitter configured to transmit an address assignment directions for directing a source access node to update an address conversion table of the source access node to include the first address and the second address of the destination mobile terminal, and to transmit an address assignment direction for directing the destination access node to update an address conversion table of the destination access node to include the second address and the third address of the destination mobile terminal a source mobile terminal being connected to the source access node via radio link,(**Inoue et al. discloses having a packet relay device 4 ("address assignment direction transmitter") in which exchange messages that contains pair information for the mobile terminal 3 ("destination mobile terminal", column 11 line 60-63)...the pair information the home address Haddr-g and the private network side address Haddr-p is notified to the Internet home agent (HA-g) 6. The Internet home agent (HA-g) 6 also notifies this pair**

information to private network home agent (HA-p, "source access node") 5 through the packet relay device 4 interpreted as "address assignment direction transmitter", column 11 line 25- 33). Inoue further discloses a mobile terminal interpreted as a "source mobile terminal") connected to a private network home agent 5 interpreted as a " source access node") in fig. 4.

However, Inoue et al. does not disclose mobile node being connected to a destination access node via a radio link. and receiving a address assignment information received from the mobile node and from the destination access node, **(Leung discloses having a mobile router ("mobile node") in a Mobile IP environment 202... the mobile router ("mobile node") is connected to a foreign agent 212 ("destination access node", fig 2A-4) via link. Leung further discloses Home agent that manges the IP addresses of the Foreign Agent s within other network whereby the mobile router roams , see column 7 line 13-67).**

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have a DCHP a server as taught by Inoue et al. with Home Agent manges the IP addresses of the Foreign Agent s within other network whereby the mobile router roams as taught by Leung to provide a efficiently managing addresses within a Mobile IP system.

However, the combination of Inoue et al. and Leung does not discloses updating conversion table of the source access node,update an address conversion table of the destination access node,**(Ahmed et al. disclose having mobility management for a multimedia mobile network , see title. Ahmed et al. further discloses having network nodes includes a updated database interpreted as "conversion table" containing addresses for the home location register of each mobile station in the system, see col. 4 lines 48-61).**

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to implement updated databases within network nodes as taught by Ahmed et al. into the modified communication system Inoue combined with Leung providing dynamic topology increasing accessibility in a mobile communication system.

With regard to claim 5, a network management server in a mobile communication network for transferring a packet to a destination mobile terminal connected to a mobile node via a radio link, the mobile node being connected to a destination access node via a radio rink;(**Inoue et al. discloses having a DCHP server in fig.4 ("network management server").., the mobile terminal 3 comes into the private network 1 of the communication service provider. The is case where the private network 1 isan radio accessible network and the mobile terminal 3 has the**

interface that is automatically switched from wire to radio when the mobile terminal 3 enters into the radio zone and makes the connection to the private network 1("radio link", column 11 line 1-8 and fig 4)... in fig. 4 mobile terminal 3 is connected to a Haddr-g (home agent, "destination access node").

However, Inoue does not disclose the server comprising: an address manager configured to manage a first address, a second address and a third address of the destination mobile terminal in accordance with address assignment information received from the destination access node and from the mobile node**; (Inoue et al. discloses having a internet home agent 6 ("destination access node") is comprised of a DHCP server whereby allocating a home address Haddr-g to the mobile terminal 3... also information on a pair home address Haddr-g ("third address") and the private network-side address Haddr-p ("second address"). Inoue et al. further discloses having a internet home agent 6 ("destination access node" column 11 line 21- 32);**and an address assignment direction transmitter configured to transmit an address assignment direction, the address assignment direction directing a source access node to which a source mobile terminal is connected via radio rink to update an address conversion table of the source access node to include the first address and the second address of the destination mobile terminal**;(Inoue et al. discloses having a packet relay device 4 ("address assignment direction transmitter") in which exchange messages that contains pair information(e.g. addresses) for the mobile terminal 3 ("destination mobile terminal", column 11 line 60-63). Inoue et al. further discloses having a home agent 5 (" source access node") that manges the**

home address ("first address") and the care-of-address ("second address") within the visiting network for the mobile terminal 3 ("new mobile terminal", column 13 line 25-33). It is inferred the home agent 5 ("source access node") is capable of managing the address of the mobile terminal 3 within the home network.

However, Inoue et al. does not disclose receiving a address assignment information received from the mobile node and from the destination access node,**(Leung discloses Home agent that manges the IP addresses interpreted as "address assignment" of the Foreign Agent interpreted as a " destination access node" within other network whereby the mobile router interpreted as "mobile node" roams, see column 7 line 13-67).**

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have a DCHP a server as taught by Inoue et al. with Home Agent manges the IP addresses of the Foreign Agent s within other network whereby the mobile router roams as taught by Leung to provide a efficiently managing addresses within a Mobile IP system.

However, the combination of Inoue et al. and Leung does not discloses updating conversion table of the source access node **(Ahmed et al. disclose having mobility management for a multimedia mobile network , see title. Ahmed et al. further**

discloses having network nodes includes a updated database interpreted as "conversion table" containing addresses for the home location register of each mobile station in the system, see col. 4 lines 48-61).

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to implement updated databases within network nodes as taught by Ahmed et al. into the modified communication system Inoue combined with Leung providing dynamic topology increasing accessibility in a mobile communication system.

7. **Claim 8** is rejected under 35 U.S.C. 103(a) as being unpatentable over Momona (US Patent 7,203,492)in view of Inoue et al. (US Patent 7,020,120)and Khalil et al. (US Patent 6,574,214).

With regard to claim 8, Momona disclose having an access node in a mobile communication network for transferring a packet to a destination mobile terminal connected to a mobile node via a radio rink, the mobile node being connected to the access node via a radio rink, (**Momona discloses having a home agents HA1, HA2, and HA3("access node") in a mobile communication system routing packets to and from mobile nodes MN1, MN2 and MN3 (column 9 line 35-50)...the mobile**

node MN1 is connected to the home agent (Fig. 13). the node comprising: an address manager configured to manage a second address and a third address of the destination mobile terminal connected to the mobilenode via a radio link, Momona discloses having a home agent ("access node") with a address mapping table 235 includes a home local multicast address (HLMC), a foreign local multicast address and a foreign local multicast address (column 11 line 15-20); a source mobile terminal being connected to the source access node via a radio link,**(Momona discloses having a home agent (HA1) receiving packets and mapping the addresses that located inside the encapsulated packet, the foreign local multicast address is retrieved and sent the that location, see column 12 line 5-25);** a router configured to route the packet to the mobile node in accordance with the changed destination address,**(Momona disclose having routers 205,206, and 207 provided in the visited domain 204 for routing packets to and from mobile nodes (column 9 line 48-50);** and an address assignment information transmitter configured to transmit address assignment information including the second address and the third address of the destination mobile terminal to a network management server in accordance with an address assignment request transmitted from the mobile node,**(Momona discloses having a mobile communication and method (title)...two mobile nodes MN-1 and MN-2 (column 5 line 55 and fig.l).., the mobile node has a location registration unit 121 ("address assignment information transmitter", fig. 1) that registers it current location with the HA1 and stores a care-of-address ("**

third address") assigned by the visited domain into the address management table (column 6 line 30-36).

However, Momona dose not explicitly disclose having a network management server **(Inoue et al. discloses having a DCHP server 7 in which it provides an address to the mobile computer, see column 7 line 49-54).**

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have a location registration unit 121 ("address assignment information transmitter") as taught by Momonoa transmitting addresses to a DCHP server as taught by Inoue et al. to efficiently mange all the mobile terminals within the network.

However, the combination of Momona and Inoue does not disclose having an address changer configured to replace a destination address in the packet transmitted from a source access node, from the second address of the destination mobile terminal to replaced by third address of the destination mobile terminal, **(Khali et al. discloses having a reduced overhead tunneling techniques in a communication network having mobile foreign agents, see title. Khali et al. further discloses eliminating the use of multiple source/destination headers attached to an information packet during the tunneling operation, see Abstract. Khalil et al. discloses having a home agent 39 replacing within an information packet 205 source/destination**

header with a new source/destination header information, see col. 10 lines 45-67). It is inferred the replacing of the source /destination header does not increase the header within the packet.

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to incorporate replacing source/destination header with a new source/destination header information as taught by Khalil et al. into the communication system of Momona combined Inoue and with providing a technique dynamically providing a plurality of destination addresses whereby increasing advertising accessibility

8. **Claim 9** is rejected under 35 U.S.C. 103(a) as being unpatentable over Hancock (GB 2377862 A)in view of Soliman et al. ("Hierarchical MIPv6 mobility management (HMIPv6)", 2002) and Watanuki et all (PG PUB 2002/0159478) and Khalil et al. (US Patent 6,574,214).

With regard to claim 9, a mobile communication control system having a plurality of access nodes, an anchor node and a mobile node, wherein a source access node to which a source mobile terminal is connected via a radio rink comprises, an address manager configured to manage a first address and a second address of a destination mobile terminal connected to the mobile node via a radio rink, **(Hancock**

discloses having a communication network 1 including a access nodes or routers 5 -7, anchor nodes 8 and 9 and mobile nodes 4 (Abstract and page 2 line 23-26)... the access router 5 and 7 ("access node") is connected to mobile node 4 (page 3 line 1-3)... the access router 5 and 6 manages address a fist address and second address for the mobile, node 4("mobile terminal", page 4 line 6-7), the anchor node including an address manager configured to manage the second address and a third address of the destination mobile terminal and encapsulation information for specifying the mobile node; an address changer configured to replace a destination address in the packet transmitted from the source access node, **(Hancock et al. discloses having a anchor node 8 and 9 in fig. 1 ... also the anchor node 8 encapsulates packets for the mobile node 4 ("mobile node", page 4 line 10-12);** from the second address of the destination mobile, terminal to replaced by third address of the destination mobile terminal, and to encapsulate the packet using the encapsulation information,**(Hancock et al. discloses having a anchor node 8 and 9 in fig. 1... also the anchor node 8 encapsulates packets for the mobile node 4 ("mobile node", page 4 line 10-12);** and a router configured to route the packet to a destination access node in accordance with the encapsulation information, the mobile node being connected to the destination access node via a radio link,**(Hancock et al. discloses having a anchor node 8 encapsulate packets for the mobile node 4 and route them to the access router 5 ("destination access node", page 4 line 10-13)... also the mobile node 4 is connected to the access router ("destination access node", fig. 1),** the destination access node including : an address manager configured

to manage the encapsulation information,**(Hancock et al. discloses having a access router 8 ("destination access router") that is capable of handling a the source and destination address encapsulated in the packet (page 4 line 11-17);** and a router configured to deencapsulate the received packet, and to route the packet to the mobile node specified by the encapsulation information encapsulated in the packet, when the packet includes the third address of the destination mobile terminal,**(Hancock et al. discloses having a access router 8 (" router") is configured to de-encapsulate the received packet and route to the mobile node 4 the encapsulated packet includes a the destination address of the mobile nod, see page 4 line 11-16);** and the mobile node,**(Hancock et al. discloses having a mobile node 4 in fig. 1 and is allocated an address when attached to a network (page 4 line 6-8).**

However, Hancock et al. does not explicitly disclose an address manager configured to manage the second address and a third address of the destination mobile terminal; an address changer configured to change a destination address in the packet transmitted from the source access node,**(Soliman discloses having a MAP (mobile anchor point) allocating the mobile node a RcoA ("second address") and LcoA addresses ("third address" ,page 15 paragraph 6.1 line 3-4).**

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have anchor node 8 as taught by Hancock et al. allocating a

RcoA ("second address") and LcoA addresses ("third address") as taught by Soliman to easily manage addresses that are local to visiting network.

However, the combination Hancock et al. and Soliman does not explicitly disclose address manager configured to manage the first address and the third address of the destination mobile terminal; an address changer configured to change a destination address in the received packet, from the third address of the destination mobile terminal to the first address of the destination mobile terminal; and a packet transmitter configured to transmit the packet to the destination mobile terminal in accordance with the changed destination address, **(Watanuki et al. discloses having a Ipv4/v6 mobile node ("mobile node") comprised of a movement status table 119 ("address manager") which is updated when there is movement register process 60 (page paragraph 140 line 1-18)... also the movement process portion 114 is configured to send out movement detection message which includes the new address destination address (page 7 paragraph 126-136 and fig. 1). In addition, Watanuki et al. discloses having Ipv6 packet transmission portion 113 ("packet transmitter") thereby transmitting packets for the Ipv4/v6 mobile node who has move to a new network and the packets are destined for a new network address which is encapsulated in the header of the packet, see page 9 paragraph 172-181).**

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to implement devices as taught by Watanuki et al. into the modified communication system of Hancock combined with Soliman to provide assistance to a mobile node in the movement between IP networks.

However, the combination of Hancock , Watanuki et al and Soliman to does not disclose having an address changer configured to replace a destination address header of in a packet transmitted from the source mobile terminal from the first address of the destination mobile terminal to replace by second address of the destination mobile terminal without increasing the size of the header , **(Khali et al. discloses having a reduced overhead tunneling techniques in a communication network having mobile foreign agents, see title. Khali et al. further discloses eliminating the use of multiple source/destination headers attached to an information packet during the tunneling operation, see Abstract. Khalil et al. discloses having a home agent 39 replacing within an information packet 205 source/destination header with a new source/destination header information, see col. 10 lines 45-67). It is inferred the replacing of the source /destination header does not increase the header within the packet.**

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to incorporate replacing source/destination header with a new source/destination header information as taught by Khalil et al. into the

communication system of Hancock combined Watanuki et al and Soliman with providing a technique dynamically providing a plurality of destination addresses whereby increasing advertising accessibility

10. **Claim 10** is rejected under 35 U.S.C. 103(a) as being unpatentable over Hancock (GB 2377862 A) and Soliman et al. ("Hierarchical MIPv6 mobility management (HMIPv6)", 2002) and Watanuki et al. (PG PUB 2002/0159478) as applied to claim 9 and in further view of Momona (US Patent 7,203,492).

With regard to claim 10, in combination Hancock et al., Soliman and Watanuki et al. teaches the mobile communication control system recited in claim 9. further comprising a network management server, wherein the mobile node comprises an address assignment information transmitter configured to transmit address assignment information for a new mobile terminal to the network management server in accordance with an address assignment request transmitted from the new mobile terminal**,(Hancock discloses having a communication network comprises a access network 2 includes mobile node 4 ("mobile node" fig. 1);anchor node; Hancock discloses having a anchor node 8 ("anchor node");** manages the first address and the second address of the new mobile terminal in accordance with the address assignment direction,(**Hancock discloses having an access router 5-7 ("source access node").., the access router allocates the mobile node a address ("first address")**

when it attaches to the network and the address of mobile node 4 (page 4 line 6-8); and the address manager of the anchor node manages the second address and the third address of the new mobile terminal and the encapsulation information, in accordance with the address assignment direction,**(Hancock discloses having a anchor nodes 8 and 9 ("anchor node") manages source and address ("second address") and a destination address ("third address") and the encapsulated information in the packet (page 4 line 14-24).**

However, Hancock does not explicitly disclose having a network management server and a mobile node comprises an address assignment information transmitter configured to transmit address assignment information for a new mobile terminal to the network management server in accordance with an address assignment request transmitted from the new mobile terminal, (**Momona discloses having a mobile communication and method (title)...two mobile nodes MN-1 and MN-2 (column 5 line 55 and fig.!)...the mobile node has a location registration unit 121 ("address assignment information transmitter", fig.l) that registers it current location with the HA1 and stores a care-of-address (" third address") assigned by the visited domain into the address management table, see column 6 line 30-36).**

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have a IPv4/v6 mobile node 106 ("mobile node") and ("network management server") as taught by Watanuki et al. with a location registration unit 121 registering address to a home agent as taught by Momona to provide a technique that will allow other devices within the network know the location of the mobile node.

The combination Hancock and Momona does not disclose having a network management server includes, an address manager configured to manage a first address, a second address and a third address of the new destination mobile terminal and the encapsulation information, in accordance with the received address assignment information,**(Inoue et al. discloses having a address management server or DCHP server utilizing moving detection processes whereby managing the different addresses for the mobile computer 2 as it move from different networks (column 11 line 55-67 and column 12 line 1-67);** address assignment direction transmitter configured to transmit an address assignment direction for the new mobile terminal to the source access node and the anchor node,(**Inoue et al. discloses having a DCHP server 7 that sends a address through a DCHPREQUEST message (column 13 line 25-33). It is inferred the DCHP have the capability to transmit the mobile computer address.**

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to incorporate an address management server or DCHP server managing the different address as taught by Inoue et al. into the modified communication system of Hancock combined with providing a mechanism that will efficiently mange every address the mobile computer will receive while in the network.

11. **Claim 11** is rejected under 35 U.S.C. 103(a) as being unpatentable over Hancock (GB 2377862 A) and Soliman et al. ("Hierarchical MIPv6 mobility management (HMIPv6)", 2002) and Watanuki et al. (PG PUB 2002/0159478) as applied to claim 9 and in further view of Inoue et al. (US Patent 7,020,120).

With regard to claim 11, in combination Hancock et al., Soliman and Watanuki et al. teaches the mobile communication control system recited in claim 9.luther comprising a network management server, wherein the source access node comprises an address assignment information transmitter configured to transmit address assignment information including the encapsulation information to the network management server in accordance with an address assignment request transmitted from the mobile node**,(Hancock discloses having an access router 5-7 ("source access node")...the access router allocates the mobile node a address ("first address")when it attaches to the network and the address of mobile node 4 (page 4 line 6-8);** and

an address assignment direction transmitter configured to transmit an address assignment direction for the destination mobile terminal to the anchor node,**(Hancock discloses having a anchor node 8 and 9 fig. 1);** anchor node,(**Hancock discloses having a anchor node 8 and 9 in fig. 1).**

However, Hancock does not disclose having a encapsulation information to the network management server in accordance with an address assignment request transmitted from the mobile node; network server includes, an address manager configured to manage the first addresses, the second addresses and the third addresses of the destination mobile terminal and the encapsulation information, in accordance with the received address assignment information,**(Inoue et al. discloses having a address management server or DCHP server utilizing moving detection processes whereby managing the different addresses for the mobile computer 2 as it move from different networks, see column 11 line 55-67 and column 12 line 1-67);** address assignment direction transmitter configured to transmit an address assignment direction for the destination mobile terminal to the anchor node, **(Inoue et al. discloses having a DCHP server 7 that sends a address through a CHPREQUEST message (column 13 line 25-33). It is inferred the DCHP have the capability to transmit the mobile computer address.**

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to implement the devices of Inoue et al. into Hancock

communication system determining destination addresses whereby efficiently manage the addresses for the mobile terminal moving throughout the network.

However, the combination of Hancock and Inoue et al. does not explicitly disclose anchor node manages the first addresses, the second addresses and the third addresses of the destination mobile terminal and the encapsulation information, in accordance with the address assignment direction,**(Soliman discloses having a MAP (mobile anchor point) allocating the mobile node a RcoA ("second address") and LcoA addresses ("third address", page 15 paragraph 6.1 line 3-4).**

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to implement a RcoA and LcoA addresses as taught by Soliman into the modified communication system of Hancock combined with Inoue to easily manage addresses that are local to visiting network.

12. Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Inoue et al. (US Patent 7,020,120) in view of Leung (US Patent 6,636,498) and Hancock (GB 2377892 A)and Ahmed et al. (US Patent 6,256,300).

With regard to claim 12 and 13, Inoue et al. discloses having a network management server in a mobile communication network for transferring a packet to a destination mobile terminal via an anchor node, the mobile terminal being connected to a mobile node via a radio rink, the mobile node being connected to a destination access

node via a radio rink, Inoue et al. discloses having a DCHP server in fig.4 ("network management server"); the server comprising: an address manager configured to manage a first address, a second address and a third address of a new mobile terminal and encapsulation information for specifying the mobile node, in accordance with address assignment information for the new mobile terminal received from. the mobile node and the anchor node,**(Inoue et al. discloses having a address management server or DCHP server utilizing moving detection processes whereby managing the different addresses for the mobile computer 2 as it move from different networks (column 11 line 55-67 and column 12 line 1-67);**and an address assignment direction transmitter configured to transmit an address assignment direction for directing a source access node to an address the first address and the second address of the new mobile terminal, and to transmit an address assignment direction for directing the anchor node to manage the second address and the third address of the new mobile terminal and the encapsulation information, a source mobile terminal being connected to the source access node,**(Inoue et al. discloses having a DCHP server 7 that sends an address through a DCHPREQUEST message (column 13 line 25-33). It is inferred the DCHP have the capability to transmit the mobile computer address.**

However, Inoue et al. does not explicitly discloses having a anchor node, **(Hancock discloses having an anchor node 8 and 9 in fig. 1);** a address assignment direction for directing the anchor node to manage the second address and the third

address of the destination mobile terminal and the encapsulation information,**(Hancock discloses having anchor nodes 8 and 9 (fig. 1) in a communication network 1 comprise an access network 2 operating with the Internet 3 (page 2 line 23- 25)... packets for the mobile node 4 ("destination mobile terminal") are sent to the anchor node 8 ("anchor node", page 4 line 8-9).**

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to incorporate an anchor node and a DCHP server as taught by Hancock into Inoue communication network provide a mechanism that will efficiently manages a mobile terminal moving throughout the network.

The combination of Inoue and Hancock does not disclose having a destination mobile terminal being connected to a mobile node via a radio link, the mobile node being connected to a destination access node via a radio link,**(Leung discloses having a mobile router ("mobile node") in a Mobile IP environment 202... the mobile router ("mobile node") is connected to a node (" mobile terminal")...the mobile router ("mobile node") is connected to a foreign agent 212 ("destination access node", fig 2A-4).**

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have a Mobile IP communication system as taught by Inoue et al. with a and anchor node 8 as taught by Hancock and a mobile router

("mobile node") connected to a node (" mobile terminal") and the mobile router ("mobile node") connected to foreign agent 212 ("destination access node") as taught by Leung to provide a system to support a Mobile IP system.

However, the combination of Inoue et al. ,Leung and Hancock does not discloses updating conversion table of the source access node and update address conversion table of the anchor node,**(Ahmed et al. disclose having mobility management for a multimedia mobile network , see title. Ahmed et al. further discloses having network nodes includes a updated database interpreted as "conversion table" containing addresses for the home location register of each mobile station in the system, see col. 4 lines 48-61).**

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to implement updated databases within network nodes as taught by Ahmed et al. into the modified communication system Inoue combined with Leung and Hancock providing dynamic topology increasing accessibility in a mobile communication system.

13. **Claim 15** is rejected under 35 U.S.C. 103(a) as being unpatentable over Hancock (GB 2377892 A) in view of Leung (US Patent 6,636,498).

With regard to claim 15, an anchor node in a mobile communication network for transferring a packet to a destination mobile terminal via an the destination mobile terminal ,**(Hancock discloses having anchor nodes 8 and 9. (fig. 1) in a communication network 1 comprise an access network 2 operating with the Internet 3 (page 2 line 23- 25)... packets for the mobile node 4 ("destination mobile terminal") are sent to the anchor node 8 ("anchor node", page 4 line 8-9);** the node comprising: an address manager configured to manage a second address and a third address of the destination mobile terminal and encapsulation information for specifying the mobile node,**(Hancock discloses having a anchor node 8 managing a second and third address for a mobile node 4 ("destination terminal") and the encapsulated packets for the mobile node4 (page 4 line 10-24);** an address changer configured to replace a destination address in the header of packet transmitted from a source access node, from the second address of the destination mobile terminal to replaced by third address of the destination mobile terminal without increasing the size of the header , and to encapsulate the packet using the encapsulation information, a source mobile terminal being connected to the source access node,**(Hancock discloses the access router 5 changes the mobile node 4 ("mobile terminal") address when it attaches the network (page 4 line 5-8). It is inferred the access router 5 has the capability to change addresses for the mobile node 4. and a router configured to route the encapsulated packet to the destination access node in accordance with the encapsulation information. Hancock et al. discloses having a access router 8 (" router") is configured to de-encapsulate the received**

packet and route to the mobile node 4 the encapsulated packet includes a the destination address of the mobile node ,see page 4 line 11-16).

However, Hancock does not explicitly disclose having an anchor node and a mobile node being connected to a destination access node via a radio link, **(Leung discloses having a mobile router ("mobile node") in a Mobile IP environment 202 and the mobile router ("mobile node") is connected to a node (" mobile terminal")...the mobile router ("mobile node") is connected to a foreign - agent 212 ("destination access node", see fig 2A-4).**

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have a communication network 1 as taught by Hancock with a mobile router ("mobile node") connected to a node (" mobile terminal") and the mobile router ("mobile node") connected to foreign agent 212 ("destination access node") as taught by Leung to provide a system to support a Mobile IP system.

14. Claims 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hancock (GB 2377892 A) in view of Watanuki et al. (PG PUB 2002/0159478) and Khalial et al. (US Patent 6,574,214).

With regard to claim 16, a mobile communication control system having a plurality of access nodes and a mobile node, comprising a source access node to which a source mobile terminal is connected via a radio rink including: an address manager configured

to manage a first address and a second address of a destination mobile terminal connected to the mobile node via a radio rink,**(Hancock discloses having a communication network 1 including a access nodes or routers 5 -7 ("source access node") anchor nodes 8 and 9 and mobile nodes 4 (Abstract and page 2 line 23-26):..the access router 5 and.7 ("access node") is connected to mobile node 4 (page 3 line 1-3)... the access router 5 and 6 ("source access node", manages address a fist address and second address for the mobile node 4 ("mobile terminal", page 4 line 6-7);** and a router configured to route the packet to the mobile node in accordance with the changed destination address,(**Hancock discloses having a access router 5 and 6 in which routes packet for the mobile node 4 to the anchor node with the change address (page 4 line 6-10).**

However, Hancock does not discloses having an address changer configured to replace a destination address in a header of a packet transmitted from the source mobile terminal from the first address of the destination mobile terminal to replaced by second address of the destination mobile terminal without increasing the size of the header, an address changer configured to replace a destination address in the header of the received packet, the second address of the destination mobile terminal replaced by the first address of the destination mobile terminal without increasing the size of the header, **(Khali et al. discloses having a reduced overhead tunneling techniques in a communication network having mobile foreign agents, see title. Khali et al. further discloses eliminating the use of multiple source/destination headers**

attached to an information packet during the tunneling operation , see Abstract. Khalil et al. discloses having a home agent 39 replacing within an information packet 205 source/destination header with a new source/destination header information, see col. 10 lines 45-67). It is inferred the replacing of the source /destination header does not increase the header within the packet.

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to incorporate replacing source/destination header with a new source/destination header information as taught by Khalil et al. into the communication system of Hancock dynamically providing a plurality of destination addresses whereby increasing advertising accessibility .

However, the combination Hancock and Khalil et al. does not disclose an address manager configured to manage the first address and the second address of a destination mobile terminal; **(Watanuki et al. discloses having a Ipv4/v6 mobile node ("mobile node") comprised of a movement status table 119 ("address manager") which is updated when there is movement register process 60 (" address changer", see page 7 paragraph 140 line 1-18)... also the movement process portion 114 is configured to send out movement detection message which includes the new address destination address, see page 7 paragraph 126-136 and fig. 1). In addition, Watanuki et al. discloses having Ipv6 packet transmission portion 113 ("packet transmitter") thereby transmitting packets for**

the Ipv4/v6 mobile node who has move to a new network and the packets are destined for a new network address which is encapsulated in the header of the packet , see page 9 paragraph 172-181); packet transmitter configured to transmit the packet to the destination mobile terminal in accordance with the changed destination address; (**Watanuki et al. discloses having a IPv4/v6 mobile node 106 fig .1 with a IPv6 packet transmitter 113 ("packet transmitter").**

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to incorporate a movement status table and movement register process as taught by Watanuki et al. into Hancock's modified communication network combined with Khalil et al. to provide a technique that will mange the addresses the mobile terminal use throughout the network.

With regard to claim 17, in combination Hancock and Watanuki et al. teaches the communication control system recited in claim 16. wherein a destination access node to which the mobile node is connected via a radio rink comprises an address assigner configured to assign a predetermined ranges of addresses to the mobile node in accordance with an address assignment request transmitted from the mobile node, the predetermined ranges of addresses being selected from among ranges of addresses assigned to the destination access node; **Hancock discloses having a**

access router 5 to 7 ("destination access node") in a communication network 1 comprises an access network 2. Hancock further discloses the access router 5 and 6 ("source access node", manages address a fist address and second address for the mobile node 4 ("mobile terminal", page 4 line 6-7). Hancock discloses having a range of address mobile node ("mobile node") and anchor node ("destination access node" page 3 line 23-26 and page 4 line 1-24);

However, Hancock does not discloses having a address manager of the mobile node assigns a second address of a new mobile terminal included in the predetermined ranges of addresses in accordance with an address assignment request transmitted from the new mobile terminal, so as to manage a first address and the second address of the new mobile terminal **, (Watanuki et al. discloses having a Ipv4/v6 mobile node ("mobile node") comprised of a movement status table 119 ("address manager") which is updated when there is movement register process 60(page paragraph 140 line 1-i 8)... also the movement process portion 114 is configured to send out movement detection message which includes the new address destination address , see page 7 paragraph 126-136 and fig. 1). In addition, Watanuki et al. discloses having Ipv6 packet transmission portion 113 ("packet transmitter") thereby transmitting packets for the Ipv4/v6 mobile node who has move to a new network and the packets are destined for a new network address**

which is encapsulated in the header of the packet (page 9 paragraph 172-181).

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have a mobile node 4 assigned a range of addresses as taught by Hancock implemented by a movement status table 119 ("address manager") as taught by Watanuki et al. to efficiently manage the addresses for the mobile terminal moving throughout the network.

15. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wantanuki et al. (PG PUB 2002/0159478) in view of Momona (US Patent 7,203,492) and Hancock (GB 2377862) and Khalil et al. (US Patent 6,574,214).

With regard to claim 18, a mobile node in a mobile communication network for transferring a packet to a destination mobile terminal connected to a mobile node via a radio link, the mobile node being connected to a destination access node via a radio rink; **Watanuki et al. discloses having a IPV4/v6 mobile node 106 ("mobile node", fig. 1) in a IP network in a network system transferring packet to either a IPv4 node103 ("destination mobile terminal") or a IPv6 node 104("destination mobile terminal" page 22 paragraph 317) connected to the IPv4/v6 mobile node 106 (fig. 1)... IPv4/v6 mobile node 106 is connected to IPv4 mobile agent 108 ("destination access node") after moving from LAN-a to LAN-b (page 11 paragraph 200);** the node comprising: an address manager configured to manage a first address and a

second address of the destination mobile terminal,(**Watanuki etal, discloses having a Ipv4/v6 mobile node ("mobile node") comprised of a movement status table 119 ("address manager") which is updated when there is movement register process 60 (page paragraph 140 line 1-18)... also the movement process portion 114 is configured to send out movement detection message which includes the new address destination address (page 7 paragraph 126-136 and fig. 1);** a source mobile terminal being connected to the source access node,(**Watanuki et al. discloses having IPv4 node ("source mobile terminal") connected to a IPv4 mobile agent ("source access node");** and a packet transmitter configured to transmit the packet to the destination mobile terminal in accordance with the changed destination address,**(Watanuki et al. discloses having IPv6 packet transmission portion 113 ("packet transmitter") that will transmitting packets for the IPv6 node ("destination mobile terminal",);** and wherein the address manager assigns a second address of a new mobile terminal included assigned by the destination access node in accordance with an address assignment request transmitted from the new mobile terminal, so as to manage a first address and the second address of the new mobile terminal,**(Watanuki et al. discloses having a Ipv4/v6 mobile node ("mobile node") comprised of a movement status table 119 ("address manager") which is updated when there is movement register process 60 (page paragraph 140 line 1-18) and also the movement process portion 114 is configured to send out movement detection message which includes the new address destination address , see page 7 paragraph 126- 136 and fig. 1).**

However, Watanuki et al. does not disclose address changer configured to change a destination address in the packet transmitted from a source access node, from the second address of the destination mobile terminal to the first address of the destination mobile terminal, (**Momona discloses having a visiting mobile node MN-l("destination terminal") receiving a multicast packet from the home agent ("source access node") change the destination address to HLMC-l(Home local multicast address, "first address"). It is inferred the visiting mobile node MN-1 ("destination terminal") receives a multicast packet from the home agent and changes and changes the HMLC-1 as the destination address.**

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have IPv4/v6 mobile node 106 ("mobile node") as taught by Watanuki et al. changing the destination address HLMC-1 within a multicast packet as taught by Momona to provide a mechanism that will track the exact location for the mobile terminal.

However, the combination of Watanuki et al. Momona does not discloses having a ranges of addresses,**(Hancock discloses having a range of address mobile node ("mobile node") and anchor node ("destination access node" page 3 line 23-26 and page 4 line 1-24).**

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have Ipv4/v6 mobile node ("mobile node") comprised of a movement status table 119 ("address manager") as taught by Watanuki into the modified system of Hancock to provide a system that prevent unauthorized user in the visiting network.

However, the combination Watanuki et al., Hancock and Momna of address changer configured to change a destination address in the packet transmitted from a source access node, from the second address of the destination mobile terminal to the first address of the destination mobile terminal, **(Khali et al. discloses having a reduced overhead tunneling techniques in a communication network having mobile foreign agents, see title. Khali et al. further discloses eliminating the use of multiple source/destination headers attached to an information packet during the tunneling operation, see Abstract. Khalil et al. discloses having a home agent 39 replacing within an information packet 205 source/destination header with a new source/destination header information, see col. 10 lines 45-67). It is inferred the replacing of the source /destination header does not increase the header within the packet.**

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to incorporate replacing source/destination header with a new source/destination header information as taught by Khalil et al. into the

communication system of Watanuki et al. combined Hancock and Momna with providing a technique dynamically providing a plurality of destination addresses whereby increasing advertising accessibility

16. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over O'Neil et al. (PG PUB 200310224758) and in view of Leung (US Patent 6,636,498).

With regard to claim 19, an access node in a mobile communication network for transferring a packet to a destination mobile terminal connected to a mobile node via a radio rink, the mobile node being connected to a destination access node via a radio link node comprising **,(O'Neil discloses having a access node 12 ("access node") fig. 1 in a mobile communication network, see page 1 paragraphs 3 line 1)and connected to a end node 14 in fig.6.., the end node may be used as a mobile terminal (MT, "destination mobile terminal", page 4 paragraph 41)... a mobile node ("mobile node") supported by a mobility agent ("destination access node", page 4 paragraph 43 line 1)... the interconnectivity in the network is provide through network links (" radio link", page 5 paragraph 5 line 1-9);**

However, O'Neil does not explicitly disclose having an address assigner configured to assign a predetermined address area to the mobile node in accordance with an address assignment request transmitted from the mobile node, the predetermined ranqes of addresses being selected from among ranges of addresses

assigned to the destination access node,**(Leung discloses having a home agent ("access node") assigning a care- of- address ("address") to a mobile router (" mobile node") in accordance request for a address ("address")... network associated with the mobile router ("mobile node") is identified by the home agent ("destination access node" column 9 line 27-67).**

However, The combination of O'Neil and Leung does not explicitly discloses having ranges of addresses,**(Hancock discloses having a range of address mobile node ("mobile node") and anchor node ("destination access node" page 3 line 23-26 and page 4 line 1-24).**

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have access node 12 ("access node") as taught by O'Neil assigning addresses to a mobile router ("mobile node".) as taught by Leung implementing a range of addresses as taught by Hancock whereby providing a system that prevent unauthorized user in the visiting network.

Allowable Subject Matter

17. **Claims 6 and 7** are allowed.

Prior Art

18. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure

Chen et al. (US Patent 6,842,456)

O'Neil (PG PUB 2003/01193912)

Okanoue et al. (US Patent 5,883,890)

Ahmed et al. (US Patent 6,690,659)

Balh et al. (US Patent 7,020,464)

Chen (US Patent 7,136,362)

19. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DEWANDA SAMUEL whose telephone number is (571)270-1213. The examiner can normally be reached on Monday- Thursday 8:30-5:30 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Q. Ngo can be reached on (571) 272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ricky Ngo/
Supervisory Patent Examiner, Art Unit 2416

/DeWanda Samuel/
Examiner, Art Unit 2416
11/27/2008